What Is Claimed Is:

1. An encoding method for skipped macroblocks in a video image, characterized in that it comprises the steps of:

step 1, adding one indication bit into a picture header for indicating a coding mode for skipped macroblocks in a current image;

step 2, selecting the coding mode for a macroblock type in the current image according to the number of skipped macroblocks, if it is a run_length coding, thenproceeding to step 3; if it is a joint coding of the number of skipped macroblocks and the macroblock type, then proceeding to step 4;

step 3, setting the indication bit of the picture header as a status indicating a run_length coding, and encoding the macroblock type in the image by the run_length coding mode; then proceeding to step 5;

step 4, setting the indication bit of the picture header as status indicating a joint coding and encoding the macroblock type in the image by the joint coding mode of the number of skipped macroblocks and the macroblock type; then proceeding to step 5;

step 5, encoding the current image and writing data into a code stream.

2. The encoding method for skipped macroblocks in a video image of claim 1, wherein the indication bit added in step 1 is for all the picture headers of the pictures to be coded.

3. The encoding method for skipped macroblocks in a video image of claim 1, wherein selecting the coding mode for a macroblock type in the current image in the step 2 is through a twice encoding procedure comprising the particular steps of:

step 200, employing the run_length coding mode for all the macroblocks in the current image to be coded, and obtaining corresponding coding performance parameters after above processing;

step 201, secondly encoding the current image to be coded , employing the

joint coding mode of the number of skipped macroblocks and the macroblock type for all the macroblocks, and obtaining corresponding coding performance parameters after above processing;

step 202, comparing the performance parameters obtained from the twice encoding, and selecting an optimal coding mode for the skipped macroblocks in the current image.

4. The encoding method for skipped macroblocks in a video image of claim 3, wherein the performance parameters to be compared comprise: a signal-to-noise ratio and a coding rate.

5. The encoding method for skipped macroblocks in a video image of claim 1, wherein selecting the coding mode for a macroblock type in the current image in the step 2 is to use an adaptive mode based on statistic to realize fast coding ,which comprises the particular steps of :

step 210, counting the number and ratio of the skipped macroblocks in the current image in each encoding;

step 211, judging whether the ratio of the skipped macroblocks in a previous frame is larger than a threshold before encoding a next frame;

step 212, if it is larger than the threshold , then proceeding to step 3 by using the run_length coding mode;

step 213, if it is less than the threshold , then proceeding to step 4 by using the joint coding mode of the number of skipped macroblocks and the macroblock type.

6. The encoding method for skipped macroblocks in a video image of claim 5, wherein the threshold is obtained by a statistical method.

7. The encoding method for skipped macroblocks in a video image of claim 1, wherein the run_length coding mode in step 3 is to employ a variable_length coding to encode the number of skipped macroblocks for continuous skipped macroblocks; and add one indication bit between continuous non-skipped macroblocks to indicate that the number of skipped macroblocks is 0.

8. The encoding method for skipped macroblocks in a video image of claim 1, wherein the joint coding mode of the number of skipped macroblocks and the macroblock type in step 4 is to process P frame image and B frame image together, add one skip type in macroblock types, determine its position in a macroblock type table by its average appearance probability, and correspondingly adjust the whole macroblock type table ;

for the skipped macroblocks, to encod them one by one by using the skip type according to their skipped counters and indicating them one by one; for the non-skipped macroblocks, to encodthem by using corresponding macroblock types.

9. The encoding method for skipped macroblocks in a video image of claim 1, wherein the joint coding mode of the number of skipped macroblocks and the macroblock type in step 4 is to process P frame image and B frame image respectively: if it is a P frame image, adding a skip type in a former macroblock type table to encode; if it is a B frame image, modifying its former Direct mode coding, the coding mode for each skipped macroblock is to use a Direct mode coding value closely followed by a CBP zero coding value, and the coding mode for the non-skipped macroblock is to use a Direct mode coding value closely followed by a CBP non zero coding value.

10. The encoding method for skipped macroblocks in a video image of claim 1, wherein said coding mode for skipped macroblocks is adaptive to be performed not only for frame coding but also for field coding.